Abstract

An image processing technique produces modified images by extracting strong features of the original image, i.e., bars and edges, and superimposing such extracted

5   features onto the original image. The invention combines the Hilbert transform of the image data with the image data in a pre-defined manner to produce the so-called energy function whose maxima correspond to the strong features of the image. Addition of these extracted features to the original image results in obtaining an enhanced image. In addition, the invention provides techniques for enhancing the real-world view of natural

10 scenes. Another practice of the invention employs a plurality of oriented filters for extracting luminance features of an image. An apparatus of the invention displays the extracted luminance features as contour version of the original image. Another apparatus of the invention provides a minified contour image of a natural scene to assist a patient having a restricted peripheral vision in locating objects in the scene.